

Claims Listing

Claims 1-18. (Cancelled)

19. (Currently amended) A method for ~~delaying or reversing the progression of~~ Alzheimer's disease enhancing antigenicity in a patient suffering from Alzheimer's disease comprising administering to a patient in need thereof a supramolecular antigenic construct reconstituted in a liposome, wherein the supramolecular antigenic construct comprises an antigenic peptide having consisting of the amino acid sequence of β -amyloid or an active fragment thereof, wherein the antigenic peptide or active fragment thereof is modified with hydrophobic moieties to enhance antigenicity, and increased levels of memory restoration and curiosity awakening as compared to prior to administration.

20. (Original) The method of claim 19, wherein the antigenic peptide or active fragment thereof is modified by pegylation, palmitic acid, poly-amino acids, poly-glycine, poly-histidine, poly-saccharides, polygalacturonic acid, polylactic acid, polyglycolide, chitin, chitosan, synthetic polymers, polyamides, polyurethanes, polyesters, co-polymers or poly(methacrylic acid) and N-(2-hydroxy)propyl methacrylamide.

21. (Withdrawn, previously presented) The method of claim 19, wherein the antigenic peptide or active fragment thereof is modified through pegylation using polyethylene glycol or modified polyethylene glycol.

22. (Withdrawn, previously presented) The method of claim 19, wherein the supramolecular antigenic constructs comprises: a peptide sequence, covalently attached to pegylated lysine--one at each terminus; wherein the free PEG terminus is covalently attached to a molecule of phosphatidylethanolamine.

23. (Previously presented) The method of claim 19, wherein the supramolecular antigenic construct is reconstituted in liposomes consisting of phospholipids and cholesterol.

24. (Previously presented) The method of claim 19, wherein the antigenic peptide comprises an amyloid peptide.

25. (Previously presented) The method of claim 19, wherein the amyloid peptide comprises SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, or SEQ ID NO: 6.

26. (Previously presented) The method of claim 19, further comprising a pharmaceutical carrier.

27. (Previously presented) The method of claim 19, wherein the supramolecular antigenic constructs may be used to treat disorders comprising Alzheimer's disease, multidrug resistance in cancer cells, or prion diseases.

28. (New) The method of claim 19, wherein the patient is an animal or human.

29. (New) The method of claim 19, wherein the β -amyloid fragment is a fragment comprising the GXXXG motif.

30. (New) The method of claim 19, wherein the β -amyloid fragment is a fragment comprising the GXXXGXXXGG motif.